

# Measuring the Ability to Care in Pre-Service Teachers

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Relationships matter in successful teaching and in particular, the ability to care appears to be a key component of successful teacher-student relationships (Stronge, 2007; Wentzel, 1992; Agne, 1992; Owens & Ennis, 2005). Borrowing from the extensive research involving student and practicing nurses and health professionals on the development and measurement of the ability to care for others, the present study seeks to measure pre-service teachers' scores on the Caring Abilities Inventory (CAI). Results of the study indicate that pre-service teachers' scores are similar to scores obtained for practicing nurses and higher than scores obtained for same gender college students of various majors. Implications for teacher preparation are discussed.

## Introduction

Essential to NCATE's description of key dispositions for pre-service teachers (see NCATE, Standard 1) is the idea that successful candidates "create caring and supportive learning environments." In fact, the notion of care has been identified, researched and determined to be one of the most crucial characteristics of successful and effective teachers (Stronge, 2007). More specifically, teachers who cultivate, nurture, and maintain healthy teacher-student relationships often demonstrate behaviors consistent with an ethic of care (Noddings, 1984). Additional research supports the notion that highly effective teachers are perceived to be caring (Burke & Nirenburg, 1998; Irvine, 2003; Howard, 2001; Noblit, 1993). Wentzel (1997) has suggested that at-risk students who perceive that their teachers care about them are more motivated to succeed in school.

Owens and Ennis have extensively reviewed much of the literature related to teachers and an ethic of care (2005). The authors posit that "the ability to enact an ethic of care in teaching should be an expectation of effective teachers. Teachers need to be able to care for themselves,

their students, the content and other members of the school community. Too often, that ability to care is assumed rather than nurtured or taught" (Owens & Ennis, 2005, p.392).

Agne (1992) surveyed 88 teacher-of-the-year winners about their teaching practices. She compared their responses to the responses of 92 in-service teachers of all levels of training and experiences (Agne, 1992, p. 121). Agne noted the following:

...superior teachers prefer a democratic, flexible climate, hold non-punitive, non-moralistic attitudes and value close personal relationships with their students which include trust, acceptance, friendship and respect. This defines a teacher belief system whose fundamental orientation is caring. (p.122)

Based on her findings, Agne suggests that there is great need for teacher training institutions to highlight the ethic of care in teacher preparation. However, Agne recognizes that caring is not easily taught, "unlike pacing, overlapping routines, caring is not a singled technique, but rather a deep emotional belief which pervades every

teacher's thoughts and behaviors" (Agne, 1992, p. 123).

Agne's powerful point that caring may not easily be taught is reflective of current issues in teacher preparation. Questions including how to articulate and measure pre-service teacher dispositions, like caring, are being debated. However, teacher preparation programs are not the only undergraduate preparatory programs that must prepare students to demonstrate care.

In fact, there is a considerable body of literature describing the nature of caring in nursing education (Appelton, 1990; Beck, 1991). In nursing, "research papers, textbooks, and curricula have embraced caring as a skill integral to the nursing profession and as a skill that can be identified, analyzed, and learned" (Fjortoft, 2004). Nursing and Health Science programs have been measuring students' abilities and capacities to care for decades (Watson, 2009).

More specifically, in the nursing text *Assessing and Measuring Caring in Nursing and Health Sciences* (2nd Edition), no less than 22 separate measures of caring are listed and described. In the book's forward, written by Strickland (2009), it is noted that the book is "A compendium of caring instruments....The various instruments presented capture the multiple essences of caring, which may be viewed as an attitude, an ability, an attribute or characteristics or a complex of interrelated behaviors" (p. xiii). In the field of education it is often suggested that caring is difficult if not impossible to measure (Agne, 1992; Noddings, 1984). The nursing and health sciences fields have acknowledged this difficulty and proceeded with offering possible solutions. In her forward to the compilation of caring measures Watson (2009) notes:

Measuring caring? Yes, but intentionally and mindfully with the consciousness that deep caring cannot be fully measured at this time. At best these measurements serve as quality

empirical indicators of caring and point back toward the deeper aspects behind the measurements. Nevertheless, the fact that caring is a complex human phenomenon does not mean we should not try to capture as much of its depth as possible. (p. 10)

Derived from the work by Mayerhoff (1971), the Caring Abilities Inventory (CAI) was created by Ngozi Nkongho (1990) and is one of the 22 instruments of caring in Watson's 2009 compilation. (see Attachment 1) The CAI was derived from the literature on caring and has four theoretical assumptions, "1. Caring is multidimensional with cognitive and attitudinal components, 2. The potential to care is present in all individuals, 3. Caring can be learned and 4. Caring is quantifiable" (Nkongho, 1990).

The CAI is a 37 item Likert scale instrument with three subscales and a total Caring Ability Index score. According to Nkongho (1990), "intercorrelation of the subscales is moderate in size and reflects separate domains within the overall concept of caring." (p. 186). Assessment of content validity has yielded a content validity index of .80. Construct validity has been supported through factor analysis and multiple studies using hypothesis testing consistent with both literature and theory (Nkongho, 1990, Simmons & Cavanaugh, 1996).

Borrowing from the extensive research on the development and measurement of the ability to care for others in students and practitioners within the nursing and health sciences fields, the present study seeks to measure pre-service teachers' scores on the Caring Abilities Inventory (CAI). Results of the study and implications for teacher preparation are discussed.

## Method

### *Participants*

Participants (n=101) were solicited voluntarily to complete the CAI from undergraduate Introduction to Education courses at the College of Charleston in Charleston, South Carolina during the Spring 2010 semester. Only individuals who indicated they intended to pursue careers in teaching were used in the sample. Of those 101 students, 50 of them indicated they intended to teach grades pre-k -5 upon graduation and 51 students indicated they intended to teach grades 6 -12 upon graduation. Of the 101 total participants, 25 were males and 76 were females.

### *Procedures*

Participants were asked to complete the Caring Abilities Inventory (CAI) anonymously and deposit their paper survey in the collection box (see attachment 1). The surveys were collected and mean total scores for the CAI Index score and the three individual subscale scores were computed. Results were analyzed and computed for both males and females. Individual index and total scores were compared with previous research detailing the average scores and norms for practicing nurses (Nkongho, 1990, Simmons & Cavanaugh, 2000) and male and female college students of various majors ( Nkongho, 1990 ). Original work with both practicing nurses and college students of various majors resulted in norms that detail ranges of Low, Medium (Average) or High as determined by .5 standard deviation on either side of the mean.

### *Results*

The subscales within the CAI fall into 3 areas: Knowing which “measures understanding of self and others”, Courage which measures the “ability to deal with the unknown” and Patience which measures “ tolerance and perseverance” (Nkhongo, 1990). Table 1 depicts sample items

from each of the subtest areas taken from the 37-item inventory.

As shown in Table 2, male pre-service teachers’ scores on the Caring Ability Inventory fell into the Low range, or .5 standard deviations below Average, when compared with previous norms obtained for practicing nurses and the Average range when compared with previously obtained norms for male college students as depicted in Table 3. For female pre-service teachers, the total CAI score was considered to fall within Average range compared with previous norms for practicing nurses and the High range, or .5 standard deviations higher than average, compared to previously obtained norms for female college students. Scores are presented alongside previously established norms for nurses and male and female college students in Table 2 and Table 3.

Table 4 depicts the total percentage of pre-service teachers who obtained a low, medium (average) and high range score for the total CAI index score compared with previously established norms for same gender college students and practicing nurses.

## Discussion

This research is a first attempt to administer and evaluate pre-service teachers’ index of caring ability as indicated by the Caring Ability Index (CAI). A full 56.4% of pre-service teachers (n=101) scored within the High range (at least .5 standard deviations above the average) of caring ability compared with other same gender college students. This finding may suggest that pre-service teachers’ have strong caring abilities relative to their college peers. In addition, 23.7% of the pre-service teachers received scores in the same range as the highest scores obtained for practicing nurses.

While the subjects who scored in the Medium and High ranges on the CAI compared with same

gender college peers and practicing nurses are encouraging it may be the students who scored in the low range that are of more interest and importance to teacher educators. More specifically, in the current research, 7 of 101 students, or 6.9 % of the pre-service teachers scored within the low range based on norms previously obtained for same age college students. While the number is small, the finding could be substantial. It may be that a student with a very low score on the CAI early on in teacher preparation programs might benefit from additional assistance, investigation and counseling. The CAI could possibly act as a reasonable first admissions screening tool to counsel prospective teachers into other career options. In addition, the CAI could be used in conjunction with dispositional data to augment the information that is gathered related to pre-service teachers with respect to their potential and ability to ensure caring and supportive classroom environments. Dispositional data are typically data that are known or observed by teaching faculty. The CAI could add a piece of data that is self-observed and reported by the pre-service teacher.

Future research directions might include using the CAI to answer the question of whether or not the ability to care is impacted by teacher preparation programs. More specifically, do pre-service teachers' scores on the CAI change from their first coursework through their clinical practice and graduation? In addition, the CAI could be used to determine if a relationship exists between effective in-service teachers and scores on the CAI?

Relationships matter in teaching and the ability to care for students appears to be an essential component of pre-service teachers' education and preparation. While we may not be able to fully measure the extent to which one human being has the capacity to care for another human being, use of an instrument borrowed from the health and nursing field appears to be a viable first step. Arguably, the use of a standard instrument, such

as the CAI, could serve as a starting point using a common language for teacher educators. The CAI has been previously administered to large groups of nurses, college students and pharmacists. It has established reliability and validity. The CAI is simple to administer and score and requires no additional training. In addition, pre-service teachers' use of a self-report of their own caring abilities encourages them to develop a better understanding of their own abilities to care for their future students thereby deepening their own self-reflection capabilities. Within current teacher education programs, the strategic use of self-report instruments like the CAI, in conjunction with gathering dispositional data, could add tremendously to the successful preparation of reflective teachers who are well prepared to engage in and cultivate caring and supportive relationships with their students.

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## Author's Note

Anne Gutshall, Assistant Professor at the College of Charleston, teaches educational psychology courses in the teacher education department. Her research interests include the affective and cognitive characteristics of effective teachers.

## Tables

Table 1  
Sample Items from the Caring Abilities Inventory (CAI)

Subscale	Sample items						
	1	2	3	4	5	6	7
	Strongly disagree						Strongly agree
<b>Knowing</b>	I make the time to get to know people. I can express my feelings to people in a warm and caring way.						
<b>Courage</b>	I do not like to go out of my way to help people. I do not like to be asked for help.						
<b>Patience</b>	I believe learning takes time. I like to offer encouragement to people.						

Table 2  
Mean Subscale and Total CAI Index scores for Male and Female Pre service Teachers and Previously Established Norms for Nurses

Pre-service teacher	CAI subscale or total score	Average scores for Pre-service teachers	Low range for Nurses	Average range for Nurses	High range for Nurses
<b>Males (n=25)</b>	Knowing	75.4	< 76.4	76.4-84.0	>84.0
	Courage	64.1	<62.5	62.5-74.0	>74.0
	Patience	58.6	< 61.0	61.0-65.2	>65.2
	<b>TOTAL</b>	198.1	<203.1	203.1-220.3	>220.3
<b>Females(n=76)</b>	Knowing	81.3	< 76.4	76.4-84.0	>84.0
	Courage	69.5	<62.5	62.5-74.0	>74.0
	Patience	61.2	<61.0	61.0-65.2	>65.2
	<b>TOTAL</b>	212.0	<203.1	203.1-220.3	>220.3

### Tables Cont.

Table 3

Mean Subscale and Total CAI Index scores for Male and Female Pre service Teachers and Previously Established Norms for Same Gender College Students

<b>Pre-service teacher</b>	<b>CAI subscale or total score</b>	<b>Average scores for Pre-service teachers</b>	<b>Low range for Same Gender College Students</b>	<b>Average range for Same Gender College Students</b>	<b>High range for Same Gender College Students</b>
<b>Males (n=25)</b>	Knowing	75.4	< 64.6	64.6-75.1	>75.11
	Courage	64.1	<54.41	54.41-66.56	>66.56
	Patience	58.6	<53.4	53.4-62.4	>62.4
	<b>TOTAL</b>	198.1	<178	178.0-199.36	>199.36
<b>Females(n=76)</b>	Knowing	81.3	< 68.8	68.8-79.5	>79.5
	Courage	69.5	<62.14	62.14-73.06	>73.06
	Patience	61.2	<58.05	58.05-64.35	>64.35
	<b>TOTAL</b>	212.0	<190.29	190.29-211.1	>211.12

Table 4

Percentage of Pre-service Teachers scoring Low, Medium and High on CAI index score based on norms for Practicing Nurses and Same Gender College Students (n=101)

	<b>Low CAI Index</b>	<b>Average CAI Index</b>	<b>High CAI Index</b>
<b>Compared with Practicing Nurses</b>	36.6%	39.6%	23.7%
<b>Compared with Same Gender College Students</b>	6.9%	37.6%	56.4%



## Attachments

### Attachment 1 Caring Abilities Inventory

Please read each of the following statements and decide how well it reflects your thoughts and feelings about other people in general. There is no right or wrong answer. Using the response scale, from 1 to 7, circle the degree to which you agree or disagree with each statement.

	1	2	3	4	5	6	7
	Strongly Disagree						Strongly Agree
1. I believe that learning takes time.							1 2 3 4 5 6 7
2. Today is filled with opportunities.							1 2 3 4 5 6 7
3. I usually say what I mean to others.							1 2 3 4 5 6 7
4. There is very little I can do for a person who is helpless.							1 2 3 4 5 6 7
5. I can see the need for change in myself.							1 2 3 4 5 6 7
6. I am able to like people even if they don't like me.							1 2 3 4 5 6 7
7. I understand people easily.							1 2 3 4 5 6 7
8. I have seen enough in this world for what I need to know.							1 2 3 4 5 6 7
9. I make the time to get to know other people.							1 2 3 4 5 6 7
10. Sometimes I like to be involved and sometimes I do not like being involved.							1 2 3 4 5 6 7
11. There is nothing I can do to make life better.							1 2 3 4 5 6 7
12. I feel uneasy knowing that another person depends on me.							1 2 3 4 5 6 7
13. I do not like to go out of my way to help other people.							1 2 3 4 5 6 7
14. In dealing with people it is difficult to let my feelings show.							1 2 3 4 5 6 7
15. It does not matter what I do as long as I do the correct thing.							1 2 3 4 5 6 7
16. I find it difficult to understand how the other person feels if I have not had similar experiences.							1 2 3 4 5 6 7
17. I admire people who are calm, composed and patient.							1 2 3 4 5 6 7
18. I believe it is important to accept and respect the attitudes and feelings of others.							1 2 3 4 5 6 7
19. People can count on me to do what I say I will.							1 2 3 4 5 6 7
20. I believe that there is room for improvement.							1 2 3 4 5 6 7
21. Good friends look after each other.							1 2 3 4 5 6 7
22. I find meaning in every situation.							1 2 3 4 5 6 7
23. I am afraid to let go of those I care for because I am afraid of what might happen to them.							1 2 3 4 5 6 7
24. I like to offer encouragement to people.							1 2 3 4 5 6 7
25. I do not like to make commitments beyond the present.							1 2 3 4 5 6 7
26. I really like myself.							1 2 3 4 5 6 7
27. I see strengths and weaknesses (limitations) in each individual.							1 2 3 4 5 6 7
28. New experiences are usually frightening to me.							1 2 3 4 5 6 7
29. I am afraid to be open and let others see who I am.							1 2 3 4 5 6 7



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|--|---------------|
| 30. I accept people just the way they are.                           | 1 2 3 4 5 6 7 |
| 31. When I care for someone else, I do not have to hide my feelings. | 1 2 3 4 5 6 7 |
| 32. I do not like to be asked for help.                              | 1 2 3 4 5 6 7 |
| 33. I can express my feelings to people in a warm and caring way.    | 1 2 3 4 5 6 7 |
| 34. I like talking with people.                                      | 1 2 3 4 5 6 7 |
| 35. I regard myself as sincere in my relationships with others.      | 1 2 3 4 5 6 7 |
| 36. People need space (room, privacy) to think and feel.             | 1 2 3 4 5 6 7 |
| 37. I can be approached by people at any time.                       | 1 2 3 4 5 6 7 |

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